

## SYNCHRONIZING SUSTAINMENT OPERATIONS

BY

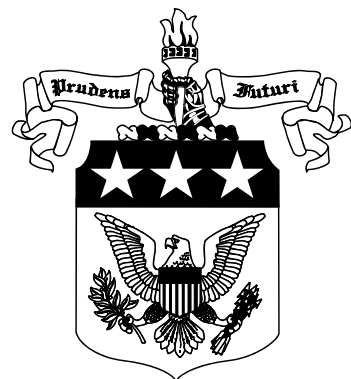
COLONEL STEVEN M. ELKINS  
United States Army

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U.S. Army War College, Carlisle Barracks, PA 17013-5050

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# USAWC STRATEGY RESEARCH PROJECT

## **SYNCHRONIZING SUSTAINMENT OPERATIONS**

by

Colonel Steven M. Elkins  
United States Army

Colonel James D. Scudieri  
Project Adviser

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U.S. Army War College  
CARLISLE BARRACKS, PENNSYLVANIA 17013



## **ABSTRACT**

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The purpose of this project is to analyze sustainment synchronization methodologies between Army of Excellence and Modular sustainment organizations. This paper examines relationships between Army of Excellence and Modular sustainment organizations within the Army's Service Component Command. The examination includes: (1) Historical review of the evolving logistics transformation architecture; (2) Review of evolving sustainment roles between modular division and logistics organizations; (3) Review of emerging doctrine that defines roles between logistics organizations and supported units; and (4) Review of current initiatives to synchronize logistics transformation efforts within an Army Service Component Command in a forward area of responsibility. Recommendations are provided to implement changes to the synchronization relationship between the transformed modular division and the supporting sustainment command.



## SYNCHRONIZING SUSTAINMENT OPERATIONS

Our transformation is improving our ability to execute and support protracted campaigns by increasing the depth and breadth of our overall capacity.<sup>1</sup>

—Francis J. Harvey, and General Peter J. Schoomaker,  
*The United States Army Posture Statement* (2007)

The United States Army is in the midst of a logistics transformation. The Army's Posture Statement expresses the driving force for this transformation of structure and processes. The Army Posture Statement, presented to Congress in 2007, defines the Army's need for change, and provides strategic-level objectives for sustainment leadership. As the United States Army continues its transformation, the logistics community engages in a radical shift in sustainment philosophy to a distribution-based logistics system with a single logistics commander in theater who has overall responsibility for force sustainment within an assigned Area of Responsibility (AOR).<sup>2</sup> This shift in philosophy alters historical relationships between supporting and supported units. These relationships were habitual within Army divisions for nearly 50 years since the inception of the modern Division Support Command (DISCOM).<sup>3</sup> Forged in peacetime and in battle, the interaction between the division G4 and the DISCOM provided the coordination and synchronization necessary to sustain the force.

This paper examines how logistics transformation affected the structure and organization of Modular Force logistics units, supporting roles of logistics units, materiel management and readiness procedures, and how transformed modular divisions adapted to meet the changes brought about by transformation. It examines the interactive roles between maneuver forces and supporting units with regards to coordination and synchronization. Finally, this paper offers conclusions and



recommendations to implementing changes to the relationships between sustainment and maneuver organizations.

### Understanding Logistics Transformation

The Army has evolved since its beginning to remain relevant given the threats and demands placed upon it. Logistics forces change based on evolving Army roles and missions. Col. Paul Jussel of the Department of Military Strategy, Planning, and Operations at the United States Army War College highlighted three trends when conducting campaign analysis. First, general officers or senior commanders pay attention to logistics. Throughout the Army's history, when generals and commanders pay attention to logistics, they bring to bear a great deal of influence on when to initiate sustainment transformations and how to implement them. Secondly, when dealing with senior leaders, personalities matter. Finally, words have meaning. The selection of words, the personality of the leader, and relationships between general officers make a difference on how they receive change. These trends determine roles and ultimately how the Army fights.<sup>4</sup> Case studies offer insights into the effects of general-officer involvement in sustainment operations and subsequently their impact on the evolution of logistics.

For example, Maj. Gen. Ulysses S. Grant, during the Vicksburg Campaign of 1863, struggled with how he could gain freedom of maneuver once he was able to establish a sufficient force on the eastern side of the Mississippi River. Tied to depots along the Mississippi River, his lines of communication (LOC) went through Corinth, Mississippi. The guns at Vicksburg along the river threatened his LOC, and on the western side of the Mississippi River the LOC was even longer and more cumbersome, causing too many delays to sustain Grant's force effectively.<sup>5</sup> With only two hundred

wagons, Grant had limited transport capabilities to sustain his force from Grand Gulf.<sup>6</sup> He decided to free his force from the constraints of defending his LOC and forced his Army to live off the land.<sup>7</sup> This decision enabled his limited wagons to haul critical sustainment items which the force could not obtain from the countryside, enhancing his ability to maneuver and engage the enemy on his terms. The significance of Grant's decision, to change how his army sustained itself, gave him greater freedom of maneuver that facilitated his capture of Vicksburg and the reestablishment of the traditional LOCs. The importance of this example is to show that when operational commanders pay attention to logistics, the changes that they make have a direct bearing on the successful outcome of a campaign.

In 1991, Operations Desert Shield and Desert Storm are excellent case studies for ongoing logistics transformation efforts. Two conclusions from that campaign bear on the current transformation: the need for a single logistics commander at the theater level and the ability of the Nation to project its force rapidly in order to fight worldwide. With regards to Col. Jussel's first trend in campaign analysis, the Central Command Commander, Gen. Norman Schwarzkopf, recognized that he needed a means to signal to his corps commanders in order to highlight the importance of logistics at the operational level. This signal came in the form of the promotion of his logistics commander, Maj. Gen. William G. Pagonis, to lieutenant general. According to Pagonis, Schwarzkopf wanted him as a "co-equal" to the corps commanders. This promotion in effect signaled the importance of logistics at the operational level.<sup>8</sup> Schwarzkopf's recognition of logistics as a combat enabler resonates in today's transformation initiative by expressing the need for a senior logistics commander in theater who is responsible to sustain the force.

In addition to sustaining the force in theater, the Army also learned the effects of rapid deployment to an Area of Operations. *Certain Victory: The US Army in the Gulf War* states that, “superior logistics becomes the engine that allows American military forces to reach an enemy from all points of the globe and arrive ready to fight.”<sup>9</sup> This repetitive lesson led to many of the initiatives in today’s transformation. The Army continued to study, evaluate and transform elements of its logistics system over the next fifteen years. This iterative process during these fifteen years fed the Army senior decision authorities and evolved from one logistics change initiative to another.

The lessons of Desert Storm led to changes in logistics systems, which included enhanced logistics automation, command and control improvements for logistics units, improved asset visibility, and a total distribution program. All of these initiatives led to the Revolution in Military Logistics (RML) in 1996. RML tenets, validated during the mid-1990s, were single logistics systems, distribution-based logistics, rapid force projection, total asset visibility, and agile infrastructure. Documents published to set the direction for RML were the *DoD Logistics Strategic Plan*, *Joint Vision 2010*, and *Army Vision 2010*. They also introduced the concept of Focused Logistics which is defined as: “... the fusion of information, logistics, and transportation technologies to provide rapid crisis response, to track and shift assets even while en route, and to deliver tailored logistics packages and sustainment directly at the strategic, operational, and tactical levels of operations.”<sup>10</sup>

This doctrinal concept of Focused Logistics marked the first time in the Army’s history that logistics systems received this emphasis of publication and focus by senior military and civilian leaders in Washington. RML led to four further initiatives: business-process changes, automation and information technology changes, hardware system

changes, and organizational changes. RML led to the Combat Service Support (CSS) Transformation in 1999, which had specific mandates for deployment and a minimized logistics footprint including the Army Power Projection Program (AP3).

AP3 focused on getting the combat force to the theater quickly and included prepositioning of equipment.<sup>11</sup> AP3 required inter-dependency of joint forces to be successful. The changes in logistics since Operation Desert Storm marked an iterative learning time where each change initiative fed the next and, as the Army moved into its Logistics transformation in 2005, many of the previous themes remained consistent. The Army needed to deploy rapidly and support itself; the Army needed to be part of a Joint team to capitalize on the capabilities of all services; and the logistics forces needed to be both more joint and expeditionary, and interdependent with other services. Thus, the logistics transformation initiatives since Desert Storm to present have built upon one another, gaining greater reliance on joint interdependency to achieve strategic and operational objectives for the expeditionary force.

Today, the Army's Modular transformation focuses on brigade combat teams (BCT). The changes to the logistics systems were to organize and source the brigade level with the layers out of Army of Excellence (AOE) logistical structure. A review of current logistics transformation reveals three broad change categories, which are: structure and organization, supporting relationships, and materiel readiness and management.<sup>12</sup> The categories are inter-related and designed intentionally to meet the Army Chief of Staff's guidance. Structural changes relate to Command and Control (C2) relationships. Organizational changes refer to specific units and how their respective capabilities changed. In some cases, those capabilities moved from one organization to another. For the current transformation the structural changes are evident in the C2

relationships of the organizations. The supporting relationships refer to how sustaining units provide support to receiving units. Materiel readiness and management are control measures that ensure the provision of supply and services. A close examination of the current logistics transformation will highlight these roles and missions associated with the three, broad, categories of change. The following paragraphs will first describe the differences between the AOE and the Modular Force C2 structure. The changes in the G4 roles and relationships that came about as a result of the C2 changes discussed above will be examined along with doctrinal changes currently planned to alleviate some of the shortfalls exposed. Finally, the paper will discuss real-world experiences, lessons learned, and on going adjustments being made by the logistics force currently in the field.

### C2 Relationships

Both the operational force and the logistics force changed during Army's transformation. The AOE and the Modular Operational Force retained structure and organizational names familiar to most individuals serving or supporting the Army. The AOE and modular structures maintained companies, battalions, brigades, divisions, corps, and armies. With the institution of the Modular Force Army, the major change was that division and corps headquarters reorganized to provide enhanced, joint capability. Other than the reorganization of the division and corps capabilities, the changes between the AOE and Modular Operational C2 elements are subtle. The modular divisions and corps are at the same C2 band and are deployed based upon the level of C2 headquarters needed to manage specific numbers of brigades. Corps can manage divisions or brigades or both depending on the mission and required span of control. This banding construct is designed to give a commander greater flexibility when

building and deploying his forces since he is better able to match his C2 with the number of brigades required.

Only minor changes occurred at the Army-level C2 structure with the shift from AOE to the Modular Force. In both, the Army Service Component Command (ASCC) is assigned to each geographic combatant command. These commands provide continuous oversight and control of army forces (ARFOR) to a combatant commander. ASCC modular construct provides flexibility at the Army level. An example would be Third United States Army serving as the Army Forces (ARFOR) for Central Command, the ASCC, and, on occasion, the Joint Forces Land Component Command (JFLCC). While many similarities remain between the AOE and the Modular operational C2 structure— especially at the Army level— the differences between the AOE and Modular logistics C2 structure are more radical at every organizational level of the Army.

The AOE force had Forward Support Battalions (FSB), Main Support Battalions (MSB), Division Support Commands (DISCOM), Corp Support Battalions (CSB), Corps Support Groups (CSG), Area Support Groups (ASG), Corps Support Commands (COSCOM), and a Theater Support Command (TSC). Each level of logistics command reported to the operational element it supported. DISCOMs reported to divisions, while COSCOMs reported to corps and TSCs reported to theater armies. When the Modular Force concept was implemented, both logistics C2 and organizational names changed.

The Modular Force introduced Combat Support Sustainment Battalions (CSSB), Sustainment Brigades (SB), Sustainment Commands (Expeditionary) (ESC) and Sustainment Commands (Theater) (TSC). Along with name changes and organizational restructuring, logistics C2 changed. For example, a TSC is assigned to the ASCC for a given theater. Within that theater the TSC commander becomes the single logistics C2

element. No longer does the logistics C2 flow through each of the operational commands. This change means all logistics C2 flows through the TSC commander for a given theater. SBs provide sustainment on an area basis and are assigned to or operationally controlled by the TSCs. SBs can organize into theater opening, theater distribution and sustaining roles based upon their assigned mission. SBs are assigned CSSBs which also task organize based upon mission. If the span of control becomes too great for the TSC to manage then doctrinally, the ESC deploys to provide operational control over forward deployed SBs.

With the Modular Force concept, the only sustainment element not owned by the TSC resides within the operational force is the Brigade Support Battalion (BSB). The BSB is assigned to the modular Brigade Combat Team (BCT), and certain support brigades, to make them more expeditionary. These changes to the logistics system satisfy the Chief of Staff of the Army's mandate that logistics transformation provide a single sustainment C2 structure and streamlined logistics.

Because the Army's transformation initiative focuses on the brigade, logistics leaders empower the BCTs, and certain support brigades, by giving their BSBs the capability to make the BCTs more self sustaining and expeditionary. The following section outlines the changes in focus from the AOE C2 structure to the transformed field sustainment (FS) organizations, beginning with the changes to the AOE division and concluding with the Echelon Above Division (EAD) logistics system.

### Logistics Organizational Changes

In the AOE, the division was the primary, tactical-level command and it deployed as the lowest-level, self-sustaining, tactical organization. A self-sustaining organization is one that is able to sustain itself without additional organizational augmentation for

approximately 72 hours. AOE divisions were normally organized into three maneuver brigades, an aviation brigade, Division Artillery (DIVARTY), and a DISCOM, as well as other separate battalions and companies required for the division to fight. Within the AOE divisions, brigades task-organized in combined-arms combat teams to execute wartime missions. AOE brigades normally deployed as part of the division, but when deployed independently, required augmentation from division-level assets to become self-sustaining. Specifically, the operational brigades required FSBs from the DISCOM in order to self-sustain.

In the AOE, the DISCOM was organized to perform basic sustainment needs. The DISCOM's units included a MSB, which operated in and supported units residing within the division rear. It also included FSBs—one per maneuver brigade— which operated in the brigade support area in direct support of their brigade.<sup>13</sup> The DISCOM's battalions organized as multifunctional units providing supply, maintenance, munitions, and medical support to division units.

Above the division, corps provided the command element to control tactical forces, such as divisions and task-organized combat support and combat service support forces.<sup>14</sup> The corps logistics organizations supported the corps and provided increased levels of supply and services to the DISCOM. The EAD organizations were a mix of functional and multi-functional battalions under the C2 of area and corps support groups, corps support commands, and theater support commands.<sup>15</sup> The Army Chief of Staff directed the logistics structure to be responsive to "...a joint and expeditionary campaign quality Army," and that the logistic structure "...eliminate redundancy while streamlining support by reducing the unnecessary layers." Finally, his logistics



capability must "...leverage emerging technologies linking supported and supporting units from CONUS to the AOR and within the AORs."<sup>16</sup>

Key to successful sustainment of operational forces under AOE was the C2 structure for the EAD logistics system. COSCOMs task-organized based upon mission or contingency. They received Forward or Rear Corps Support Groups (CSG (FWD)) (CSG (Rear)), depending on their placement in corps' assigned area. A CSG (FWD) mission supported corps units operating in the CSG (FWD) assigned area and corps units operating in the division area to its front. Structured to support a variety of contingencies, the COSCOM focused on managing stockpiles of materiel and services over a vast area.<sup>17</sup> As with the DISCOM and the division, the COSCOM was assigned to a corps and supported the corps' assigned or attached units.

The nature of this supporting arrangement made for deliberate redundancy within the logistics system. The redundancy was in part functional to ensure the corps units did not overload the DISCOM. An example is a corps unit operating in the division's area. The unit would not draw support from the DISCOM, but rather from the corps' CSG (FWD). This support relationship produced both an echelon and layered effect, which continued to the theater level. This effect produced certain inefficiencies, but those inefficiencies existed in the interest of effectiveness in a supply-based system. Corps formations relied on "echeloned, reinforcing force structures" with "echeloned stockpiles."<sup>18</sup> Echeloning and reinforcing stocks in the support structure held percentages of like materiel at different levels within the system to support forward units.<sup>19</sup>

The focus within the AOE logistics system was heavily on supply point distribution,<sup>20</sup> whereby units went to supporting supply and maintenance organizations

to pick up sustainment materiel. The DISCOM performed related materiel management functions resided in the Division Materiel Management Center (DMMC), which provided centralized and integrated materiel management for supplies and maintenance.<sup>21</sup> The DMMC provided supply and maintenance management for the FSBs.<sup>22</sup> FSBs were organized with a Support Operations Office (SPO) to coordinate Direct Support (DS) sustainment to the brigade.<sup>23</sup> To execute its materiel management mission the Corps Materiel Management Center (CMMC) performed similar functions to that of the DMMC with regards to managing the materiel assigned to its units. The DMMC submitted maintenance requests and supply requisitions to the CMMC who in turn either processed them to the Theater Army Materiel Management Center (TAMMC) or to the National Inventory Control Points (NICP) in the Continental United States (CONUS).<sup>24</sup> Each echelon evaluated and processed requests and requisitions as necessary to fulfill requirements. The EAD MMCs held and processed the materiel.

The COSCOM provided additional supplies in greater quantity and services in greater scope to those owned by the division.<sup>25</sup> This pattern of echeloned redundancy continued at the Theater Support Command and offered greater depth in support and services. This AOE structure focused on managing stockpiles of materiel while modularity seeks to reduce stockpiles by focusing on distribution, thereby streamlining sustainment. The AOE structure lacked streamlining through the materiel management centers to get needed supplies and services through the logistics' system to meet evolving rapid deployment initiatives.

Transforming to modular organizations, the Army shifted the lowest, self-sustaining, deployable force from the division to the brigades. To make the brigades self-sustaining, the divisional assets provided to them during war became assigned to

them in peace. This structural change formalized the habitual support to the operational brigade by assigning the battalion within the brigade. The AOE FSBs now form the nucleus of the new Modular Force BSBs. The DISCOM inactivated and its capabilities redistributed to the BSBs and EAD sustainment units. The BSBs received a 300 percent increase in personnel, which equated to new or enhanced medical, transportation, ammunition, supply, maintenance management, and planning capabilities. These enhancements helped fulfill the expeditionary quality of the BCTs that the Army Chief of Staff directed.<sup>26</sup>

The Modular Army's direction to streamline materiel management worked to reduce the redundancy at both supply points and materiel management control points found within the corps and theater AOE logistics system. Structural changes began to streamline sustainment functions. The re-structuring of the logistics forces was a complicated process that began with a complete redesign of the sustainment system from the bottom up. The objective was to make the brigade modular for all organizations: combat, combat support, and combat service support. The brigades become the interchangeable elements of the Modular force.

The SB replaced the AOE organizations of DISCOMs, CSGs, and ASGs. The old AOE organizations in-activated or re-flagged to form the basis of these new sustainment organizations. The capabilities, equipment, and personnel were re-distributed across the new sustainment formations. The SB assumed an area support mission and, in emerging doctrine, reports to the TSC. SBs task organize to perform specific missions, and they receive battalions and companies that task organize to perform specific missions. SBs perform three general missions: theater opening, theater distribution, and

sustaining. To accomplish these missions, additional changes in structure and organization followed below the SB level.

At the battalion level, units previously designated CSBs became Combat Sustainment Support Battalions (CSSB). The CSBs and CSSBs both task organized based upon mission; however, the CSSB has enhanced support operations capability enabling it to fit into the modular force. Because of a requirement for added asset visibility within the Modular logistics system, the SB received limited materiel management capability. The AOE sustainment system had maintained this capability at the DISCOM, COSCOM and TAACOM levels.

#### Changes in G4 Roles and Relationships

The role of the AOE Division Assistant Chief of Staff Logistics (G4) was to plan and coordinate sustainment operations for the division.<sup>27</sup> The relationship between the G4 and the DISCOM commander was close because the DISCOM commander was the division's senior logistician and logistics operator to execute the sustainment plans.<sup>28</sup> While the DMMC exchanged materiel management data with the CMMC and higher, the Division G4 "...coordinate(ed) logistics support that exceed(ed) the DISCOM's capability with the corps G4 and COSCOM."<sup>29</sup> Working under this construct for more than 40 years, relationships between the G4 and the DISCOM and relationships between the G4 and the corps sustainment elements became the accepted norm.<sup>30</sup>

With the shift to the Modular Force Army, AOE logistics forces inactivated or reflagged. The change had significant impact on the supporting relationships between divisions and corps. The role of the G4 in the Army's Modular Force construct and its relationship to the supporting organizations became less clear during transformation. The change left a seam in the synchronization and coordination of sustainment flow to

transformed modular divisions and subordinate brigades. In the AOE, the division owned and ultimately controlled the supporting relationship of the DISCOM. Under the Modular Force construct, the ASCC exercises complete control through the TSC. Despite this change in the relationship between sustainment and operational organizations, the role of the G4 remained the same. Structurally, the G4 no longer maintains a direct relationship to the supporting command, but is expected to perform the same staff function as if there was no structural change. The AOE division G4 managed relationships across C2 seams in support capabilities between the division and the corps. With the loss of a logistics colonel commander within the division, the Modular Force division G4 has lost the additional influence to garner support which enhanced this synchronization across seams.

Today, the Modular Force division G4 manages across C2 seams but with the organizational changes that moved the logistics brigade commander outside the division C2, the G4 must use skills of persuasion to influence the SB in direct support of the division. The ability of the G4 to influence the supporting SB depends on their personalities and relationships, not on organization structure and this fact affects the division commander's ability to weight his main effort.<sup>31</sup> With the removal of the logistics units from the operational control of the divisions, a major seam developed between the operational and sustaining forces. In an effort to repair seams created in the shift from AOE to Modular Force, proposed logistics doctrine dictates that a division commander request support through the ASCC to get the TSC to weight the main effort.<sup>32</sup>

Today the BSBs have limited materiel management capability while their requisition and reporting systems provide the hard data that sustainment managers use to push materiel to supported units. Without materiel management capabilities, the

transformed division relies upon the reporting of the BSB and the execution capabilities of the SB. Since there is no longer a logistics commander at the division level, the G4 must expand as the primary synchronizer of the sustainment effort to assigned divisional assets. Consequently, the G4's role is one of a materiel readiness monitor/reporter, while articulating the division commander's desire for support priorities to ASCC G4.

The G4 receives reports or accesses reporting mechanisms to determine the materiel readiness of the division's assigned and attached units. Only then can the G4 accurately advise the commanding general on the status of his force and assess his combat power or ability to perform his wartime activities or contingencies. The ability to understand the current readiness of the BCTs and have the visibility into the distribution system enables the G4 to better advise the commander on the probabilities associated with maintaining his force at a specific readiness level. The G4 reports the status to the next higher command or to the ASCC, who in turn sets priorities of support to the TSC based upon the current mission.<sup>33</sup> Without a direct link to his supporting commander, the division commander must rely on processing readiness requirements through one or possibly two levels of command, if he chooses to use logistics to weight his main effort.

### Emerging Doctrine

Combined Arms Support Command (CASCOC) is the Army's center to develop concepts and doctrine for combat service support organizations. Its mission is to "...provide Training and Leader Development, and develop concepts, doctrine organizations, life-long learning, and materiel solutions, to provide the Combat Service Support to sustain a campaign quality Army with joint and expeditionary capabilities."<sup>34</sup> CASCOC's latest doctrine emphasizes Materiel Readiness and Materiel Management.

Materiel Readiness is the availability of materiel required by a military organization to support its wartime activities or contingencies, disaster relief (flood, earthquake, etc.), or other emergencies. Materiel Management is the monitoring and control of on-hand stocks, ensuring quality control, requirements determination, local purchase, retrograde, and distribution of materiel.<sup>35</sup>

Revised CASCOM doctrine emphasizes the difference between Materiel Readiness and Materiel Management in order to define and clarify the primary responsibility of the G4 for Materiel Readiness and the sustainment command's primary responsibility for Materiel Management. CASCOM views these two functions as the dividing point in responsibilities between the G4 and the sustainment command.<sup>36</sup> The G4 is principally responsible for monitoring and tracking materiel readiness and the sustainment command is responsible for the materiel management functions. Materiel readiness and management are interdependent functions and require close coordination to synchronize the flow of sustainment stocks to maintain combat organizations. New CASCOM doctrine intends to facilitate this interdependence; however, problems in real-world execution still exist.

Part of the problems that still remain extend from the fact that when the AOE division transformed into the Modular Force division headquarters, the G4 remained at ten positions in accordance with the Table of Organization and Equipment (TOE).<sup>37</sup> CASCOM studies reveal shortfalls in the G4's ability to monitor and track readiness. The G4 is forced to rely on the supporting SB to fill shortfalls in capability. CASCOM recommends an increase in capability for the division G4 by adding 35 personnel. This increase in manning reflects better asset visibility for major end items, general supplies,

and munitions.<sup>38</sup> It also enables greater tracking and coordination within the distribution system through improved capability within the division transportation office (DTO).<sup>39</sup>

An oversight in emerging doctrine is the lack of written guidance regarding the role of the G4 in relation to supporting organizations. Guidance provided in AOE Field Manuals described the relationship between the division G4 and the DISCOM, and between the division G4 and the EAD supporting units, specifically the COSCOM.<sup>40</sup> Current draft field manuals lack this same role and relationship discussion that helped define the G4's interaction with supporting organizations.<sup>41</sup> Without this definitive guidance, G4s are left to define their relationships with supporting organizations on a case-by-case basis.<sup>42</sup> Currently, lessons from the field indicate inconsistent methods in defining these roles and relationships.

#### Emerging G4 Role Through Transformation in Action

Interviews with past and current G4s reveal common problems in the implementation of current transformation efforts. Problems exist in the transformation of the sustainment organizations; the loss of materiel readiness and management capability within the division; and structural shortfalls within the division headquarters to meet readiness monitoring, assessing, and reporting requirements. With an understanding that doctrine is lacking and/or under development, divisions have adopted different methods to streamline synchronization and coordination of sustainment support from SBs. Division headquarters changed and have become more modular and expeditionary and thus far more capable of both joint and expeditionary operations. However, the division G4 did not change organizationally to adjust to the loss of DISCOM. Subsequently, the loss of the DISCOM with no increase in G4 capability increased the gap in the synchronization of the seams between the G4 and



the SB. Interviews with division G4s and SB commanders indicate divisions now choose to either empower their G4s with increased Borrowed Military Manpower (BMM) or demand more attention from the supporting SB to streamline reporting and materiel management. With regards to the G4's role, divisions may rely more heavily on the G4 to synchronize and coordinate sustainment functions, often without giving the G4 additional capability. If reinforced with BMM, the G4 is often saddled with a force without the logistics training necessary to track and understand materiel readiness issues. The reliance on undermanned, nontransformed G4s is problematic given current G4 manning and increased responsibilities. In addition, other changes cloud G4 roles and responsibilities. Where divisions and the supporting SBs share same home-basing, reliance on the SB is greater, yet the preexisting relationship masks the capability shortages in the G4.

During some deployments to Operation Iraqi Freedom, SBs, versus the G4, provided the readiness status reporting based solely on existing pre-transformational relationships.<sup>43</sup> The relationship between the division and the SB changed little because the SB maintained many of their SOPs and TTPs from their AOE pre-transformed support relationship. During the deployments of the 4<sup>th</sup> Infantry Division (Mechanized), 101<sup>st</sup> Airborne Division (Air Assault), and 25<sup>th</sup> Infantry Division (Light), the SB provided support formed around the previous DISCOM and home station CSGs. The SB retained many of the pretransformed relationships to the supported division because this relationship formed at home station during predeployment planning.<sup>44</sup> The pre-established relationship and colocation enabled smoother transitions while offering expanded capability to support more units than the division, although operations were not executed in accordance with the intent of the Modular Force design. In the case of

4<sup>th</sup> ID, 4<sup>th</sup> SB met all of the division's requirements while maintaining the flexibility to execute other missions issued by 3<sup>rd</sup> COSCOM largely due to preexisting relationships. In other words, their ability to meet mission demands had more to do with preexisting "AOE-based" relationships and less on Modular Force changes. Although 4<sup>th</sup> SB experience, as well as that of the 101<sup>st</sup> SB, may initially validate the streamlining and flexibility in the new structure, the same may not hold true for organizations with no preexisting relationships.

In other instances when a preexisting habitual relationship was not available, divisions took similar approaches to organize their sustainment staffs into cells and centers to streamline readiness reporting and synchronize sustainment flow to divisional assets.<sup>45</sup> In other words, where SBs did not exist, units essentially created an organization to fulfill the material management functions of an SB. 2<sup>nd</sup> Infantry Division (Mechanized) tested organizational changes to the G4 section to improve synchronization across the C2 seam. The Modular Force transformation in Korea led 2<sup>nd</sup> Infantry Division to operate without a supporting SB. To minimize the loss of the old DISCOM, 2ID organized its staff by management functions to monitor, track, and report readiness statuses better.<sup>46</sup> For the transformed 2<sup>nd</sup> Infantry Division Headquarters, assigned BSBs pass requisitions directly to the 19<sup>th</sup> ESC through the use of field automation systems. The 19<sup>th</sup> ESC's Distribution Management Center consolidates these requisitions and issues Materiel Release Orders (MRO) for supplies for shipment to 2<sup>nd</sup> Infantry Division BSBs. To synchronize the flow of sustainment stocks to its BSBs, 2<sup>nd</sup> Infantry Division established its Sustainment Operation Center (SOC) that works directly with the 19<sup>th</sup> ESC to track and synchronize the flow of sustainment materiel. The

synchronization between the 2ID SOC and the 19<sup>th</sup> ESC enables the Division Commanding General to ensure fulfillment of his priorities of support are met

Another method implemented to fill the seams left by the separation of the G4 from the SB is the use of liaison officers (LNOs). LNOs operating between the supporting SB and the division SOC enhanced coordination and streamlined materiel readiness, management, and reporting.<sup>47</sup> The addition of these capabilities provides another avenue for coordination and synchronization across sustainment relationships.

### Conclusions and Recommendations

The Army's Posture Statement expresses the goals to achieve a flattened C2 structure and enhanced business processes through transformation of the Army's sustainment commands. The logistics community continues a radical shift in sustainment philosophy to a distribution-based logistics system with a single logistics commander in theater who has overall responsibility for force sustainment within an assigned AOR.<sup>48</sup> This philosophy altered habitual relationships between supporting units and the divisions.

This paper reviewed how logistics transformation affected the structure and organization, materiel management and readiness procedures, supporting roles of logistics units, and how Army transformed modular divisions adapted to meet the changes brought about by transformation. It also examined the relationships between divisions and SBs with regards to coordination and synchronization given the loss of direct C2.

Doctrine continues to develop as the Army transforms faster than assessments of the second and third-order effects become clear. However, habitual relationships and dynamic leadership within division G4s and SBs enabled successful execution of

missions to date. Where possible, divisions and SBs at the same home station deployed with one another to maintain habitual support relationships. Division G4's need the expanded capability proposed by CASCOT to fully enable the synchronization of sustainment to the division. In addition, draft sustainment organization field manuals must include a more in-depth discussion of the roles and responsibilities of the division G4 and its relationship to sustainment commands and brigades.

Thus the single C2 concept currently is working in OEF and OIF, but more as a result of preexisting relationships and ad hoc work-a-rounds than Modular Force directed change. The relationships between division G4s and SB commanders are affecting the implementation on a case-by-case basis, which leads to inconsistent trends for materiel readiness reporting and management procedures. CASCOT's proposed organizational additions to the division G4 enable a more-capable readiness tracking and reporting staff that can provide near real-time status to the division commander. Work-a-rounds and Soldier's ingenuity will continue to enable effective operations until relationships can be established through experience and thus span the seam between G4 and SB.

Gen. (Ret) Gary Luck captured the importance of closing the seam between the division and the sustainment command when he said, "We have learned in OEF and OIF that the support command relationship is probably the most powerful relationship in terms of gaining access to additional capabilities. This relationship in essence makes the supporting commanders responsible for the success of the supported commander."<sup>49</sup>

## Endnotes

<sup>1</sup> Francis J. Harvey, and General Peter J. Schoomaker quoted in U.S. Department of the Army, *The Statement on the Posture of the United States Army* (Washington, D.C.: U.S. Department of the Army, 2007), iv.

<sup>2</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," briefing slides, 8 February 2008, slide 3; available from Army Knowledge Online; Internet; accessed 23 February 2008.

<sup>3</sup> Colonel Paul Jussel, Director Department of Military Strategy, Planning, and Operations, interview by author, 27 February 2008, U.S. Army War College, Carlisle Barracks, PA.

<sup>4</sup> Ibid.

<sup>5</sup> E.B. Long, ed., *Personal Memoirs of U. S. Grant*, 2d ed. (New York: De Capo Press, 2001), 237-238.

<sup>6</sup> Ibid., 259.

<sup>7</sup> Leonard Fullenkamp, Stephen Bowman and Jay Luvaas, eds., *Guide to the Vicksburg Campaign* (Lawrence: University Press of Kansas, 1998), 200.

<sup>8</sup> Major General William G Pagonis, *Moving Mountains: Lessons in Leadership and Logistics from the Gulf War* (Boston: Harvard Business School Press, 1992), 144.

<sup>9</sup> Brigadier General Robert H. Scales Jr., *Certain Victory: The US Army in the Gulf War* (Fort Leavenworth: Command and General Staff College Press, 1994), 376.

<sup>10</sup> U.S. Joint Chiefs of Staff, *Joint Vision 2010* (Washington, D.C.: U.S. Joint Chiefs of Staff, 1996), 24.

<sup>11</sup> Association of the United States Army, "07-11 Power Projection," linked from *AUSA Legislative Agenda Home Page*, at "Our Resolutions," available from <http://www.ausa.org/WEBINT/DeptGovAffairs.nsf/byid/JRAY-6VBPNV>; Internet; accessed 11 January 2008.

<sup>12</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008. This information was synthesized from the CASCOT slide presentation.

<sup>13</sup> U.S. Department of the Army, *Forward Support Battalion*, Field Manual 63-20 (Washington, D.C.: U.S. Department of the Army, 26 February 1990), 2-2, 2-3.

<sup>14</sup> U.S. Department of the Army, *Corps Support Commands*, Field Manual 63-3 (Washington, D.C.: U.S. Department of the Army, 30 September 1993), 1-1.

<sup>15</sup> Ibid., 1-10, 1-11.

<sup>16</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, slide 3.

<sup>17</sup> U.S. Department of the Army, *Theater Support Command*, Field Manual 4-93.4, (Washington, D.C.: U.S. Department of the Army, 15 April 2003), 4-1, 4-2.

<sup>18</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, slides 29, 39.

<sup>19</sup> U.S. Department of the Army, *Division Support Command, Armored, Infantry and Mechanized Infantry Divisions*, Field Manual 63-2 (Washington, D.C.: U.S. Department of the Army, 20 May 1991), 3-1.

<sup>20</sup> U.S. Department of the Army, *Corps Support Commands*, 1-16.

<sup>21</sup> U.S. Department of the Army, *Division Support Command, Armored, Infantry and Mechanized Infantry Divisions*, 1-4.

<sup>22</sup> U.S. Department of the Army, *Forward Support Battalion*, 3-2.

<sup>23</sup> *Ibid.*, 3-5.

<sup>24</sup> U.S. Department of the Army, *Corps Support Commands*, 3-7 through 3-10.

<sup>25</sup> U.S. Department of the Army, *Corps Support Groups*, Field Manual 54-30 (Washington, D.C.: U.S. Department of the Army, 17 June 1993), 1-5.

<sup>26</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, 11.

<sup>27</sup> U.S. Department of the Army, *Division Operations*, Field Manual 71-100 (Washington, D.C.: U.S. Department of the Army, 28 August 1996), 3-13.

<sup>28</sup> U.S. Department of the Army, *Division Support Command, Armored, Infantry and Mechanized Infantry Divisions*, 2-1.

<sup>29</sup> U.S. Department of the Army, *Division Operations*, 3-13.

<sup>30</sup> *Ibid.*, 1-1, 1-2.

<sup>31</sup> LTC Michael Snow, G4 1<sup>st</sup> Cavalry Division, telephone interview by author and email communication, 12 February 2008.

<sup>32</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, slides 34.

<sup>33</sup> *Ibid.*, slide 34.

<sup>34</sup> *U.S. Army, Combined Arms Support Command Home Page*, available from <http://www.cascom.lee.army.mil>; Internet; accessed 8 February 2008.

<sup>35</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, slides 38.

<sup>36</sup> *Ibid.*, slides 29, 39.

<sup>37</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," briefing slides, 11 November 2007, slide 18; available from Army Knowledge Online; Internet; accessed 23 February 2008.

<sup>38</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, slide 42.

<sup>39</sup> Ibid., slide 54.

<sup>40</sup> U.S. Department of the Army, *Division Support Command: Light Infantry, Airborne, and Air Assault Divisions*, Field Manual 63-2-1 (Washington, D.C.: U.S. Department of the Army, 16 November 1992), 4-2, 4-3.

<sup>41</sup> U.S. Department of the Army, *The Sustainment Brigade*, Field Manual-Interim 4-93.2 (Washington, D.C.: U.S. Department of the Army, Final Draft), C-2.

<sup>42</sup> U.S. Department of the Army, *The Modular Force*, Field Manual-Interim 3-0.1 (Washington, D.C.: U.S. Department of the Army, January 2008), 1-19.

<sup>43</sup> Colonel Gustave Perna, "OIF Rotation," After Action Review briefing slides, Combined Arms Support Command. Colonel Gustave Perna, 4th Sustainment Brigade, telephone interview by author. Lieutenant Colonel Mario Garcia, former G4, 101<sup>st</sup> Airborne Division (Air Assault), U.S. Army, interview by author.

<sup>44</sup> Colonel James Scudieri, former Cdr, 101st Sustainment Brigade, "OIF Rotation," After Action Review briefing slides, Combined Arms Support Command. Colonel Gustave Perna, "OIF Rotation," After Action Review briefing slides, Combined Arms Support Command. Colonel Gustave Perna, 4th Sustainment Brigade, telephone interview by author. Lieutenant Colonel Mario Garcia, former G4, 101<sup>st</sup> Airborne Division (Air Assault), U.S. Army, interview by author. Colonel Lawrence Kominiak, former G4, 25th Infantry Division (Light), telephone interview by author.

<sup>45</sup> Lieutenant Colonel Michael Snow, G4, 1st Armored Division, email interview by author. Author's personal experience as G4, 2nd Infantry Division (Mechanized), July 2006 to June 2007.

<sup>46</sup> Author's personal experience as G4, 2nd Infantry Division (Mechanized), July 2006 to June 2007.

<sup>47</sup> Ibid., and 19th Sustainment Command (Expeditionary).

<sup>48</sup> U.S. Army, Combined Arms Support Command, "Sustainment Transformation Overview," 8 February 2008, slide 3.

<sup>49</sup> GEN (ret) Gary Luck quoted in U.S. Army, Combined Arms Support Command, "AUSA Logistics Symposium Panel Presentation," briefing slides, Richmond, VA, 16 May 2007, slide 2.